

Indiana Industrial Water Users: Voluntary Conservation and Efficiency Efforts—Suggested Best Management Practices

The Indiana Department of Natural Resources has compiled the following suggested Best Management Practices (BMPs) to provide assistance to Indiana Significant Water Withdrawal Facilities (SWWF) in the development of water conservation & efficiency efforts under the provisions of the Great Lakes-St Lawrence River Basin Compact (IC 14-25-15-5). Pursuant to this legislation, conservation and efficiency efforts are voluntary in nature for existing SWWF facilities in the Great Lakes Basin; however, Indiana is promoting voluntary conservation and efficiency efforts at all facilities throughout the State. A voluntary checklist is being provided to each registered SWWF in Indiana according to their water use category. The checklist contains examples of BMPs that might be considered by a facility. This list is intended as a guide and should not be considered complete or mandatory, as no one set of BMPs would be appropriate for or applicable to, all facilities.

Selection of Best Management Practices for Conservation and Efficiency Efforts:

C u r r e n t	P l a n n e d	<p>Please check those items that are <i>currently</i> being utilized by the facility, and those that may be <i>planned</i> or implemented over the next water use reporting year. Do not check either box if the item is not applicable to your facility or organization.</p> <p><u>Please return this checklist with your annual water use report.</u></p>
<input type="checkbox"/>	<input type="checkbox"/>	Perform water use audits—good industrial conservation programs depend on accurate use data that assesses water demand on a system by system or process by process basis.
<input type="checkbox"/>	<input type="checkbox"/>	Implementation of a comprehensive water accounting and loss control program including system inspections, leak identification, and reduction of overflow.
<input type="checkbox"/>	<input type="checkbox"/>	Develop a system wide maintenance and repair program including leak detection and repair to mitigate water losses to enhance conservation objectives.
<input type="checkbox"/>	<input type="checkbox"/>	Install cooling towers or retrofit once-through applications with closed loop recirculation systems to reduce cooling water use.
<input type="checkbox"/>	<input type="checkbox"/>	Replace water cooled equipment with air cooled equipment.
<input type="checkbox"/>	<input type="checkbox"/>	Development of meter maintenance plan and replace old inaccurate meters.
<input type="checkbox"/>	<input type="checkbox"/>	Submeter at each process or piece of equipment that consumes large volumes of water such as wash water, rinse water, or cooling water.
<input type="checkbox"/>	<input type="checkbox"/>	Operate pumps to meet, but not exceed, process rates to reduce excessive pumping.
<input type="checkbox"/>	<input type="checkbox"/>	Turn off all flows during shutdowns and use solenoid valves to stop the flow of water when production stops.
<input type="checkbox"/>	<input type="checkbox"/>	Calibrate and clean process equipment to enhance thermal and hydraulic performance efficiency.
<input type="checkbox"/>	<input type="checkbox"/>	Identify and prioritize opportunities for water reclamation and reuse throughout the processes and facility.

<input type="checkbox"/>	<input type="checkbox"/>	Implement process or equipment upgrades that result in more efficient operations and water use. (e.g. Adjusting water intake design and pump speed, increasing efficiency of the whitewater system in a mill.)
<input type="checkbox"/>	<input type="checkbox"/>	Incorporate water conservation policies and procedures into employee training programs; involve employees in conservation and efficiency initiatives.
<input type="checkbox"/>	<input type="checkbox"/>	Invite presentations or seminars by appropriate agencies and organizations.
<input type="checkbox"/>	<input type="checkbox"/>	Incorporate water conservation policies and procedures into employee training programs.
<input type="checkbox"/>	<input type="checkbox"/>	Participate in water conservation advisory group or organization to raise awareness.
<input type="checkbox"/>	<input type="checkbox"/>	Other [please specify]: _____ _____ _____ _____ _____

Evaluation and Modification of Voluntary Conservation and Efficiency Efforts

Upon adoption of applicable voluntary Best Management Practices (BMPs), the facility may consider evaluating and updating their goals and objectives on a periodic basis. Modifications to chosen BMPs may be based upon an evaluation of previously selected goals and objectives and any new relevant information or changes in water use processes.

The facility could consider documenting the following information to evaluate their voluntary selection of conservation and efficiency goals and the BMPs to reach them:

- A list of dates and descriptions of BMPs chosen as well as conservation & efficiency measures implemented
- Means used to quantify water savings
- Approximate amounts of water saved for each measure implemented
- Discussion about whether or not the goals of the plan have been met
- If objectives were not met, an analysis of why the objectives were not met and a discussion of revisions to goals & objectives and the chosen BMPs may be helpful for the facility to meet their voluntary objectives in the future.

Have questions, comments, or need further assistance?

Please contact the Indiana Department of Natural Resources, Division of Water at 317-232-4160 or toll free 877-928-3755; or see our website at:
www.in.gov/dnr/water.

Mail your completed checklist to:
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Facility Registration Info